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(FILE 'HOME' ENTERED AT 13:30:00 ON 12 SEP 2000)

FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, SCISEARCH, BIOTECHDS' ENTERED AT
13:30:04 ON 12 SEP 2000

L1 233464 S GENOTYP?
L2 16 S "PROSTATE CARCINOMA TUMOR ANTIGEN"
L3 1 S L1 AND L2
L4 10 DUP REM L2 (6 DUPLICATES REMOVED)
L5 2 S L1 AND "PCTA-1"
L6 1 DUP REM L5 (1 DUPLICATE REMOVED)

=> d ibib abs 14 1-10

L4 ANSWER 1 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 2000:238914 BIOSIS
DOCUMENT NUMBER: PREV200000238914
TITLE: Molecular analysis of PCTA-1, a novel human
tumor-associated galectin.
AUTHOR(S): Gopalkrishnan, R. V. (1); Roberts, T. (1); Kang, D.-C.
(1);
Tuli, S. (1); Christiansen, K. (1); Fisher, P. B. (1)
CORPORATE SOURCE: (1) Columbia Univ, New York, NY USA
SOURCE: Proceedings of the American Association for Cancer
Research
Annual Meeting, (March, 2000) No. 41, pp. 541.
Meeting Info.: 91st Annual Meeting of the American
Association for Cancer Research. San Francisco,
California,
USA April 01-05, 2000
ISSN: 0197-016X.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1
ACCESSION NUMBER: 1999:566222 CAPLUS
DOCUMENT NUMBER: 131:180807
TITLE: Detection of metastatic cancer cells using
**prostate carcinoma tumor
antigen gene-1**
INVENTOR(S): Fisher, Paul B.
PATENT ASSIGNEE(S): The Trustees of Columbia University In the City of
New
York, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9943857	A1	19990902	WO 1999-US4342	19990226
W: AU, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				

PT, SE
 AU 9928819 A1 19990915 AU 1999-28819 19990226
 PRIORITY APPLN. INFO US 1998-32211 19980227
 WO 1999-US 42 19990226

AB This invention provides a method of detecting cancer metastatic cells in
 a subject, comprising: (a) obtaining a nucleic acid sample from the
 subject's blood; (b) amplifying nucleic acid encoding the product of
prostate carcinoma tumor antigen
 gene-1 (PCTA-1); and (c) detecting the presence of nucleic acid encoding
 the product of the PCTA-1, thereby detecting cancer metastatic cells in a
 subject. This invention also provides the methods for PCR amplification.
 The primers for the above-described methods are 5'-AAGCTGACGCCTCATTTGCA-
 3', 5'-AACCACCAATGGAAGTGGGT-3', 5'-AATGGCTTCTGTGATACT-3', and
 5'-GGCTATAAGTGTGCTGC-3'.

REFERENCE COUNT: 1
 REFERENCE(S): (1) Heid; Genome Research 1996, V6, P986 CAPLUS

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1999:795960 CAPLUS
 DOCUMENT NUMBER: 132:45834
 TITLE: Polymorphic markers of the gene encoding
prostate carcinoma tumor
antigen-1 (PCTA-1) and their diagnostic and
 prognostic applications
 INVENTOR(S): Blumenfeld, Marta; Bougueleret, Lydie; Chumakov, Ilya
 PATENT ASSIGNEE(S): Genset, Fr.
 SOURCE: PCT Int. Appl., 339 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964590	A1	19991216	WO 1999-IB1072	19990604
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9939514	A1	19991230	AU 1999-39514	19990604
PRIORITY APPLN. INFO.:				
			US 1998-88187	19980605
			US 1998-102324	19980928
			WO 1999-IB1072	19990604

AB The invention concerns the genomic sequence and cDNA sequences of the
 PCTA-1 gene. The invention also concerns biallelic markers of the PCTA-1
 gene and the assocn. established between these markers and prostate
 cancer. The cDNA sequence encoding a mouse homolog of the PCTA-1 protein
 is also provided. The invention provides means to det. the
 predisposition
 of individuals to prostate cancer as well as means for the diagnosis of
 prostate cancer and for the prognosis/detection of an eventual treatment
 response to agents acting against prostate cancer.

REFERENCE COUNT: 8
 REFERENCE(S): (1) Chee Mark; WO 9818967 A 1998
 (2) Inst Genomic Research; WO 9807830 A 1998
 (3) Kruglyak, L; Nature Genetics 1997, V17(1), P22
 (4) Schork, N; American Journal of Human Genetics
 1997, V61(Suppl 4), PA293
 (7) Wang, D; Science 1998, V280, P1077 CAPLUS

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1999:27668 CAPLUS
 DOCUMENT NUMBER: 130:65224
 TITLE: Human prostate tumor inducing gene-1, its detection,
 and methods of preparing various hybridoma cell lines
 INVENTOR(S): Fisher, Paul B.; Shen, Ruoqian
 PATENT ASSIGNEE(S): The Trustees of Columbia University In the City of
 New York, USA
 SOURCE: U.S., 58 pp., Cont.-in-part of U.S. Ser. No. 351,888.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5851764	A	19981222	US 1995-371377	19950111
WO 9621671	A1	19960718	WO 1996-US307	19960111
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2209941	AA	19960718	CA 1996-2209941	19960111
AU 9647511	A1	19960731	AU 1996-47511	19960111
AU 709056	B2	19990819		
EP 804458	A1	19971105	EP 1996-903411	19960111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 11502404	T2	19990302	JP 1996-521785	19960111
PRIORITY APPLN. INFO.:			US 1990-603804	19901025
			US 1993-106323	19930813
			US 1994-225493	19940411
			US 1994-351888	19941208
			US 1995-371377	19950111
			WO 1996-US307	19960111

AB This invention provides an isolated mammalian nucleic acid mol. having the

sequence of Prostate Tumor Inducing Gene-1 (PTI-1), and a method of detecting its expression in cells and tissues is also provided.

Sequences

of PTI-2, PTI-3, and **Prostate Carcinoma Tumor**

Antigen Gene 1 (PCTA-1) are also provided. Expts. were conducted to det. if DNA transfection combined with an immunol. masking tactic could

be used to efficiently generate hybridomas that secrete monoclonal antibodies reacting with cell-surface mols. expressed on genetically altered cells. This method is termed surface-epitope masking (SEM).

This

invention provides a method for prepg. a hybridoma cell line which produces an antibody capable of specifically binding to a cell surface-expressed protein. Also, this invention provides a method for prepg. a hybridoma cell line which produces an antibody capable of specifically binding to a cell surface-expressed protein which expresses on the surface of one cell type but not the other. This invention also provides a method of prepg. DNA encoding a cell surface antigen assocd. with a neoplastic, human cell. This invention provides a method to prep. a hybridoma cell line which specifically recognizes and binds to a tumor assocd. antigen assocd. with a neoplastic, human cell.

REFERENCE COUNT: 18

REFERENCE(S):

- (2) Anon; EP 0346702 1989 CAPLUS
- (6) Bos; US 4871838 1989 CAPLUS
- (7) Clewell; US 4631259 1986 CAPLUS
- (9) Drebin, J; Nature 1984, V312, P545 CAPLUS
- (10) Hollingsworth, M; Cancer Res 1986, V46, P2482

L4 ANSWER 5 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1998:196689 BIOSIS
DOCUMENT NUMBER: PREV199800196689
TITLE: Selective expression of the **prostate carcinoma tumor antigen** gene, PCTA-1, in human prostate carcinoma cell lines and tissues.
AUTHOR(S): Su, Z.-Z. (1); Shi, Y.; Goldstein, N. I.; Fisher, P. B.
CORPORATE SOURCE: (1) Coll. Physicians Surgeons Columbia Univ., New York, NY 10032 USA
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (March, 1998) Vol. 39, pp. 414.
Meeting Info.: 89th Annual Meeting of the American Association for Cancer Research New Orleans, Louisiana, USA
March 28-April 1, 1998 American Association for Cancer Research
. ISSN: 0197-016X.
DOCUMENT TYPE: Conference
LANGUAGE: English

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1997:254624 CAPLUS
DOCUMENT NUMBER: 126:291642
TITLE: A new tandem-repeat galectin isolated as a tumor antigen by the new SEM method
AUTHOR(S): Arata, Yoichiro
CORPORATE SOURCE: Department Biological Chemistry, Teikyo University, Kanagawa, 199-01, Japan
SOURCE: Trends Glycosci. Glycotechnol. (1997), 9(45), 183-184
CODEN: TGGLEE; ISSN: 0915-7352
PUBLISHER: FCCA
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English/Japanese
AB A review with 1 ref. discussing the use of surface epitope masking in the cloning of the PCTA-1 gene, the PCTA-1 gene product putative biol. function as a galectin, and its detection on human prostate carcinoma tissue.

L4 ANSWER 7 OF 10 MEDLINE
ACCESSION NUMBER: 96376752 MEDLINE
DOCUMENT NUMBER: 96376752
TITLE: Prostate cancer gene hunters track their quarry [news].
AUTHOR: Stephenson J
SOURCE: JAMA, (1996 Sep 18) 276 (11) 861-3.
Journal code: KFR. ISSN: 0098-7484.
PUB. COUNTRY: United States
News Announcement
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199612

L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2
ACCESSION NUMBER: 1996:546376 CAPLUS
DOCUMENT NUMBER: 125:187611
TITLE: Cloning and expression of cDNA for **prostate carcinoma tumor antigen** gene 1 and prostate tumor-inducing gene-1, -2, and -3 and diagnosis and treatment of prostate cancers
INVENTOR(S): Fisher, Paul B.; Shen, Ruoquian
PATENT ASSIGNEE(S): The Trustees of Columbia University In the City Of,

SOURCE: USA
PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9621671	A1	19960718	WO 1996-US307	19960111
W: AU, CA, JP, MX, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5851764	A	19981222	US 1995-371377	19950111
AU 9647511	A1	19960731	AU 1996-47511	19960111
AU 709056	B2	19990819		
EP 804458	A1	19971105	EP 1996-903411	19960111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE

JP 11502404	T2	19990302	JP 1996-521785	19960111
PRIORITY APPLN. INFO.:				
			US 1995-371377	19950111
			US 1990-603804	19901025
			US 1993-106323	19930813
			US 1994-225493	19940411
			US 1994-351888	19941208
			WO 1996-US307	19960111

AB The invention provides isolated cDNA to mammalian **Prostate Carcinoma Tumor Antigen Gene-1**, Prostate Tumor Inducing Gene-1, Prostate Tumor Inducing Gene-2, and Prostate Tumor Inducing Gene-3. Also claimed are expression vectors and recombinant cells and methods for prep. the 4 proteins; antisense oligonucleotides to nucleic acids encoding the 4 proteins; antibodies to the 4 proteins; use of the proteins and antibodies for diagnosis; and, use of the antisense oligonucleotides and antibodies for therapy. A method called SEM (surface epitope mapping) was used to prep. monoclonal antibodies to prostate carcinoma proteins. Rapid expression cloning in the CREF-Trans 6 system and differential RNA display were used in identification of the PCTA-1, PTI-1, PTI-2, and PTI-3 genes. The protein encoded by PTI-1 is a truncated and mutated EF-1.alpha.. PTI-2 and PTI-3 cDNA's are homologous to Mycobacterium rRNA genes.

L4 ANSWER 9 OF 10 MEDLINE
ACCESSION NUMBER: 96293510 MEDLINE
DOCUMENT NUMBER: 96293510
TITLE: Surface-epitope masking and expression cloning identifies the human **prostate carcinoma tumor antigen** gene PCTA-1 a member of the galectin gene family.
AUTHOR: Su Z Z; Lin J; Shen R; Fisher P E; Goldstein N I; Fisher P B
CORPORATE SOURCE: Department of Pathology, Columbia University, College of Physicians and Surgeons, New York, NY 10032, USA.
CONTRACT NUMBER: CA35675 (NCI)
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1996 Jul 9) 93 (14) 7252-7. Journal code: PV3. ISSN: 0027-8424.
PUB. COUNTRY: United States
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
OTHER SOURCE: GENBANK-L78132
ENTRY MONTH: 199610

AB The selective production of monoclonal antibodies (mAbs) reacting with defined cell surface-expressed molecules is now readily accomplished with

an immunological subtraction approach, surface-epitope masking (SEM). Using SEM, prostate carcinoma (Pro 1.5) mAbs have been developed that react with tumor-associated antigens expressed on human prostate cancer cell lines and patient-derived carcinomas. Screening a human LNCaP prostate cancer cDNA expression library with the Pro 1.5 mAb identifies a gene, **prostate carcinoma tumor antigen-1** (PCTA-1). PCTA-1 encodes a secreted protein of approximately 35 kDa that shares approximately 40% sequence homology with the N-amino terminal region of members of the S-type galactose-binding lectin (galectin) gene family. Specific galectins are found on the

surface

of human and marine neoplastic cells and have been implicated in tumorigenesis and metastasis. Primer pairs within the 3' untranslated region of PCTA-1 and reverse transcription-PCR demonstrate selective expression of PCTA-1 by prostate carcinomas versus normal prostate and benign prostatic hypertrophy. These findings document the use of the SEM procedure for generating mAbs reacting with tumor-associated antigens expressed on human prostate cancers. The SEM-derived mAbs have been used for expression cloning the gene encoding this human tumor antigen. The approaches described in this paper, SEM combined with expression cloning, should prove of wide utility for developing immunological reagents specific for and identifying genes relevant to human cancer.

L4 ANSWER 10 OF 10 BIOSIS COPYRIGHT 2000 BIOSIS

ACCESSION NUMBER: 1996:257255 BIOSIS

DOCUMENT NUMBER: PREV199698813384

TITLE: Surface-epitope masking (SEM), an immunological subtraction

approach for developing monoclonal subtraction antibodies reacting with cell surface expressed molecules:

Application

to prostate cancer.

AUTHOR(S): Su, Z.-Z.; Lin, J.; Fisher, P. E.; Shen, R.; Fisher, P. B.

CORPORATE SOURCE: Columbia Univ. College Physicians Surgeons, New York, NY 10032 USA

SOURCE: Proceedings of the American Association for Cancer

Research

Annual Meeting, (1996) Vol. 37, No. 0, pp. 462-463.

Meeting Info.: 87th Annual Meeting of the American

Association for Cancer Research Washington, D.C., USA

April

20-24, 1996

ISSN: 0197-016X.

DOCUMENT TYPE:

Conference

LANGUAGE:

English